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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,046	10/23/2003	Ian Campbell McGill	1170/39383B	6445

279 7590 08/08/2005

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EXAMINER
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PERRIN, JOSEPH L

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/692,046

Applicant(s)

MCGILL ET AL.

Examiner

Joseph L. Perin, Ph.D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-20,23,26,27,30 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-20,23,26,27,30 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20050428.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. In response to applicant's response filed 25 February 2005, the status of the application is as follows:

The objection of the specification is withdrawn in view of applicant's amendment to the title overcoming the objection.

The provisional objection of duplicate claims is withdrawn in view of applicant's amendment overcoming the objection.

Applicant's arguments regarding the rejection under 35 U.S.C. §102 over BASHARK have been fully considered but they are not persuasive. Applicant argues that step (b) "requires 'stopping the pump for a second period of time' less than 10% of the first period of time" and that "use of the word 'stopping' in this step requires that the pump actually stop and therefore, the second period of time must be non-zero". This is not persuasive because such argument is not commensurate in scope with applicant's claimed stop time range of "less than 10%" which includes a stop time of 0%. Such arguments raises potential indefiniteness questions since applicant clearly claims the range to include 0% but presents arguments that the time is "non-zero". Moreover, applicant argues that "it would be impossible for the flow rate to reduce to zero if the period of time for which the pump was stopped was zero". Such argument in view of the fact that the claimed stop time includes 0% of the first time further raises question of enablement of how the claimed range, which clearly includes a stop time of 0%, is

capable of reducing a flow rate to zero. Accordingly, since applicant positively recites the claimed stopping time range to include 0%, the claims are interpreted in such manner. Thus, a stopping time of 0% reads on applicant's claimed invention. Applicant's further arguments regarding step (b) are not persuasive for at least the reasons indicated above.

Applicant's arguments regarding the rejection under 35 U.S.C. §§102/103 over JP 61-162980 have been fully considered but they are not persuasive. In response to applicant's argument that JP 61-162980 does not disclose stopping the pump (and flow rate) because the RPM of the motor speed return to zero, applicant's arguments are not commensurate in scope with the claimed invention. Firstly, recitation of JP 61-162980 reads on applicant's claimed invention for at least reasons indicated above in BASHARK. Furthermore, the rapid ON/OFF clearly indicates a starting and stopping of the pump in Figure 2 of JP 61-162980. It is noted that applicant's "stopping" is not limited to stopping the RPM of the pump and the RPM of the motor of a pump does not necessarily have to be at zero RPM to stop pumping action. Accordingly, the broad language of "stopping the pump" is anticipated by Figure 2 of JP 61-162980.

***Claim Rejections - 35 USC § 102***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 14, 17 & 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by either U.S. Patent No. 4,481,786 to BASHARK. BASHARK discloses a

washing machine with AC induction motor and operating "water drain or pump-out mode." It is noted that applicant's step of "stopping the pump...for a second period of time which is less than 10% of said first period of time" reads on a stopping time of 0%, and thus the "stopping the pump" step is construed as being optional and would read on a washing machine which starts a drain pump until a flow rate reduces to substantially zero. Recitation of BASHARK reads on applicant's claimed invention.

4. Claims 17-20, 23, 26-27, 30 & 33 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 61-162980 (cited by applicant; no translation readily available at the time of this Office action; English abstract submitted by the Examiner). In the abstract, JP '980 discloses a washing machine with a motor which drives washing and dewatering (draining) operations intermittently (repeating ON/OFF steps). The Figures also show rapid (instantaneous) repeating ON/OFF operations with the OFF operation time being a fraction (less than 10%) of the ON operation time. If, assuming *arguendo*, Applicant takes the position that JP '890 does not disclose the exact ranges and/or values as claimed by Applicant, the position is taken that it would have been obvious to optimize such ranges since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233, 255 (CCPA 1955). See also *In re Waite*, 77 USPQ 586 (CCPA 1948); *In re Scherl*, 70 USPQ 204 (CCPA 1946); *In re Irmischer*, 66 USPQ 314 (CCPA 1945); *In re Norman*, 66 USPQ 308 (CCPA 1945); *In re Swenson*, 56 USPQ 372 (CCPA 1942); *In re Sola*, 25 USPQ 433 (CCPA 1935); *In re*

*Dreyfus*, 24 USPQ 52 (CCPA 1934). Moreover, it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
6. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.
8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph L. Perrin, Ph.D.  
Primary Examiner  
Art Unit 1746

jlp